



Volume 42, Number 2

Summer 1976

ST. LOUIS AUDUBON SOCIETY

ANNUAL MEETING, MAY 24, 1976

The Annual Dinner and Meeting of the members of the St. Louis Audubon was held on Monday evening, May 24th, in the Sesquicentennial Room, Busch Center, St. Louis University.

Following dinner the business meeting was called to order by President Martin Schweig, Jr. He announced that the necessary quorum of members were present and welcomed all of them and their guests.

Announcement was made that the Photography Section, led by Mr. and Mrs. Edward Mason, would have a showing of their prize winning photos at the St. Louis County Library on June 4 at 8:00 p.m.

The Society was saddened to note the death of two prominent members during the past year- Mr. James Comfort and Mr. Frank Erb.

Mr. Erb's son, John, presented to the Society a handsome plaque of the Audubon emblem that his father had made. This beautiful plaque will be very useful at displays or booths of any kind. Mr. Schweig expressed the special thanks of the entire membership to the Erb family.

The revisions to the Articles of Incorporation and the amendments to the Bylaws of the Saint Louis Audubon Society were voted on, and the approval was unanimous.

The report of the Nominating Committee was given by Mrs. Edward Mason. There were no nominations from the floor and the members voted unanimously to accept the slate of the Committee. Mrs. Gerome Chambers, Miss Emily Fast, Father James Mulligan, Mrs. J. Russell, Mr. Steven Wylie and Mr. Stephen Skrainka will serve on the Board of Directors for the next three years. (A complete list of officers and Board members will be found on page 2.)

It was announced that the project SOAR had been very successful in the past year and that the St. Louis Audubon Society sent five people to National Audubon Society Nature Camps.

After the business meeting members and guests were charmed by a musical program by Mrs. Chris Condon.

Mrs. William Wiese then introduced Mr. and Mrs. Harvard Hecker, members of the St. Louis Audubon Society, who gave an outstanding word and picture program on African Birds, entitled by them, "Feathered Bonus".

ST. LOUIS AUDUBON SOCIETY BOARD OF DIRECTORS
1976 - 1977

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HOW ARE THE EAGLES DOING?

BY EDGAR DENISON



The National Eagle Count, held annually in February, is an event which gets many enthusiasts out of bed at an ungodly hour for a long drive to Clarksville, often in bitter cold, to meet with other eagle voyeurs. Revived by coffee and doughnuts they hopefully join the group which will be lucky enough to report the largest number of eagle sightings. Most St. Louisans are dumbfounded to learn that we do have many eagles in our vicinity during winter. Ever more eagle watchers join our annual counting day. We spot them, we count them, we report them. Unfortunately, that seems to be the end of the interest in our bald eagle population. Why are we counting them, what are the results of the count, locally, regionally, nationally? I have been asking that question for years without getting an answer. Now, I got busy, wrote a few letters, and received a small mountain of information. Hoping that there are others who take an interest in the fortunes of the bald eagle, I present some data which I gathered from many reports.

The bald eagle is one of two eagles which nest in North America, the other being the golden eagle. The bald eagle is basically restricted in its distribution to North America with a few straying into eastern Siberia, while the golden eagle has a circumpolar habitat; that is, he is found in North America, Greenland, Europe and Asia. Our forefathers chose wisely when they selected the bald eagle as our national emblem on June 20, 1782. Many objected at the time because our eagle will eat dead fish and carrion, and that repulsed some. Benjamin Franklin rooted for the wild turkey as emblem bird.

Ornithologically our bald eagle is NOT of the genus *Aquila*, the generic name of the golden eagle. *Aquila* is the Roman word for eagle, the proud symbol of the Roman legions. The bald eagle is *Haliaeetus leucocephalus*, literally translated, a white-headed sea eagle.

The bald eagle ranges from northeastern Alaska eastward through northern Canada to Newfoundland and southward across the continent to Lower California, Arizona, New Mexico, the gulf states and southern Florida. There was a time when our emblem bird nested in every state in the Union. Ornithologists discern two races of the bald eagle. The northern race is larger and from Alaska spreads out over all the continent with the exception of Florida and parts of the Atlantic coast which are inhabited by the somewhat smaller southern race. Nesting areas of the northern race within the contiguous United States cover a very small portion of our country. By far the largest breeding territory runs through northern Minnesota, Wisconsin and Michigan. There are widespread nesting grounds in Canada and minor concentrations along the northern Atlantic coast and the Pacific northwest. Southern Florida is the center of the southern race with the densest nesting habitat in the Everglades. By far the largest population of bald eagles resides in Alaska.

Eagles are very large birds. Females, who are larger than the males, may reach a wingspan of 8 feet (males 7 feet.) The normal weight is from 10 to 14 pounds. Mature birds, both male and female, have brilliant white heads and tails with dark brown bodies, though, on closer inspection, the feather of the body is seen to be outlined in a lighter hue of brown. Young eagles go through several color stages from almost black-brown to a lighter brown with more or less extensive white markings on the underside of the wings. Not until they are 4 or 5 years old - depending on the source of the information - do young birds get their all-white heads and tails which make the bald eagle such an outstanding sight. The flight is characterized by deep slow strokes of the wings, or, whenever warm air currents permit, majestic soaring.

The nest is a disorderly assembly of branches on top of a tree, preferably a pine. Eagles repair their nest each year by adding new sticks and branches, until some nests become monstrosities. Roger Tory Peterson mentions a nest near St. Petersburg in Florida which was piled 20 feet high and measured $9\frac{1}{2}$ feet across. Obviously, sooner or later such a weight will come crashing down in a storm. The preference for pine trees, where they are growing, has been computed as three out of four nesting sites. Almost all bald eagles migrate, some of them over enormous distances. Whereas the northern eagles are forced to move south in winter, the Florida population moves north in the summer to escape the heat. Roger Tory Peterson tells us, "There are no eagles in Florida during the hot summer months." By far the most important wintering area is the Middle-west. There the eagles assemble wherever water provides the most important food - fish. Winter territory covers more than six states: Nebraska, Kansas and Oklahoma to the west; and Iowa, Missouri, parts of Illinois, and Arkansas to the east. This is where most of the eagles who nest in Canada and the northern United States spend the harsh winter. Other, much smaller winter habitat areas lie all across the western United States.

As already mentioned, fish is the preferred food, and studies have shown that some eagle populations subsist on a 90% fish diet. But eagles are not choosy when hungry and will hunt rabbits and other small mammals. We all know that they are on the lookout for injured waterfowl. It is an unforgettable experience to see and listen to a few thousand 'sitting ducks', screaming at a low-flying eagle. There are reports that eagles will dive at ducks and force them to dive, repeating the maneuver until the duck is exhausted. Somehow, I have my doubts that an eagle is that ambitious. We have all seen eagles sitting on the frozen Mississippi laboring on taking a frozen fish from the ice. Eagles do fish while wading in shallow water. On an eagle count a few years ago on a warm day, we observed four eagles on such a fishing expedition. Eagles will try to 'steal' fish from ospreys and gulls. This is well authenticated, but I know of equally well documented cases where an osprey took a fish away from an eagle, though the latter case is certainly the rarer one. Eagles have been accused of carrying away lambs, calves and even children. Most of these stories are hearsay. A strong mature eagle can barely fly carrying a weight of 12 pounds and can cover only a very short distance with weights of 7 to 8 pounds. Actual experiments have shown this. All those horror stories should be checked carefully after detoxification of the 'eye-witness'.

We come now to the crucial problem of eagle survival and the rearing of eaglets. One man more than all others must get the credit for alerting us that the eagle population was decreasing at unbelievable speed in the thirties to fifties of this century. He is Charles L. Broley, a retired banker, who, disregarding his age, became a one man eagle expert by climbing thousands of times into eagle aeries, watching the eggs and the eaglets and banding over 1000 eagles for scientific studies. Most of this activity took place in Florida. His findings were alarming. In 1946 he found in a specific area 73 active eagle nests. In 1957 there were only 43. Similarly, on an island off the east coast he observed 20 nests in 1935 but only 6 in 1966. Other investigators came up with quite parallel and alarming results. What had happened?

Man the universal destroyer of nature is the main culprit. Uppermost, there was the wonder poison DDT. It was nearly indestructible, a chemical which washed into rivers, lakes and oceans entering the bodies of water-dwelling creatures. And it accumulated in the fatty tissues of the predator food chain in ever greater concentrations. The eagle, being on the top of this chain became the most vulnerable recipient. DDT interferes with the formation of calcium compounds essential to the development of sound eggs, and so the shells cracked before the eaglets were ready to emerge. Other hydro-carbons and also the heavy metals such as mercury, have been proven detrimental to wildlife in general and to the eagles in particular. Man drained marshes and thereby eliminated needed food supply; he bulldozed the woods to harvest timber and thereby eliminated nesting areas; he invaded streams, creeks and bayous with his noisy motorboats and thereby disturbed the eagles who stopped breeding; he strung power lines which killed eagles; he straightened waterways causing siltation thereby eliminating the food chain which nourishes the eagles.

Last, but not least, there are in our midst certain sub-humans who delight in shooting eagles. Of all the dead eagles examined by doctors in the Fish and Wildlife Service nearly half died from gunshot. There was such an imbecile in the vicinity of St. Louis last winter and rewards were posted for his apprehension. Urban sprawl provides a major encroachment on the nesting sites of the Florida eagle population. While some eagles will nest close to human

habitations others will flee them. Man's thoughtless behavior is not the only cause of eagle trouble. Severe weather such as hurricanes or droughts or unusually severe winters seem to affect eagles and discourage breeding. Even under favorable conditions not all pairs of eagles raise young each year, and if eggs are laid, there are not more than two per nest and survival of the eaglets is by no means assured. Thus pressures brought by man and by nature caused the eagles to reduce reproduction to a point where extinction was highly probable.

The picture for Alaska is different. From 1917 through 1952 Alaska had a bounty on eagles, and the Wildlife Service estimates that over 100,000 - one hundred thousand! - eagles were killed. Since the bounty has been abandoned the eagles have made a substantial recovery, and current estimates place the population near 50,000 (Fish & Wildlife Service).

Where do we stand today? DDT and Dieldrin have been outlawed, the former for some time. Rachel Carson put her name and reputation on the line in the fight against the chemical industry which profited from the sale of DDT and its allies. Conservation-oriented organizations have purchased and are acquiring land where eagles nest. The federal agencies - the Forest Service, the Fish and Wildlife Service, the National Park Service - are committed to do all in their power to protect the eagles. A large public has been made aware that the eagles need help to survive.

Let us consider first the southern race, which is based on Florida. The U.S. Fish & Wildlife Service believe that between 800 and 1000 of this endangered species exist at present. Nesting success has remained fairly constant in recent years, meaning that around 200 young have been raised each year. The southern race seems to hold its own, but the Service states, "It is perhaps premature at this time to attempt to make a definitive statement on the Florida bald eagle population." Unfortunately, outside the Everglades National Park the pressure of land developers is still continuously encroaching on eagle habitat.

The northern race is best analyzed by major geographical regions. The Forest Service tabulates data for Michigan, Minnesota and Wisconsin, and for this territory an astounding increase in 'verified nests', 'active nests' and 'young per active nest' has been reported. Verified nests have increased from 156 in 1964 to 398 in 1975 with an increase for each year. 'Successful nests', that is nests in which eagles were raised successfully, increased from 36 in 1964 to 117 in 1975. While this increase of over 200% is remarkable, we must note that of 298 occupied nests in 1975 only in 117 were young birds raised! May be, the human race could learn something from the eagles?

The largest concentration of eagles in winter occurs in the middle west. Here we have two sets of figures. One deals with the Mississippi River from its source to Tennessee plus the Wisconsin and Illinois Rivers. The base of this territorial study is the annual eagle count by Audubon and various state and federal agencies. It is important to keep in mind that these counts, which take place during a few hours on one day, can be subject to major variations. Weather plays an all-important part - not only the weather on the day of the count, but even more the weather pattern prior to that day. To illustrate, on a Sunday in February of this year we spotted 31 eagles from a single point not far from Grafton. The Mississippi and the Illinois Rivers were covered with ice, and it was a very cold day. Just one week later all ice was gone and so were the eagles. They probably had not departed for good, but were most likely near better feeding areas during that warm spell. The figures below were kindly supplied by Mr. Elton Fawks of East Moline, Illinois, a gentleman who has contributed much leadership to the national eagle count.

National Eagle Count in Mississippi, Wisconsin and Illinois River Valleys (Bald Eagles)

	<u>Bald Eagles Sighted</u>	<u>Percent Immature</u>
Average 1962-1966	601	20%
" 1967-1971	745	28%
" 1972-1975	1017	29.2%
February 14, 1976	1084	31.5%

As the first 3 lines deal with 4 year averages, the figures are meaningful even if the count of any one year should be 'off'. More important than the large increase in total sightings is the 11.5% increase in the percent of immature birds, certainly a good omen for the future of the bald eagle.

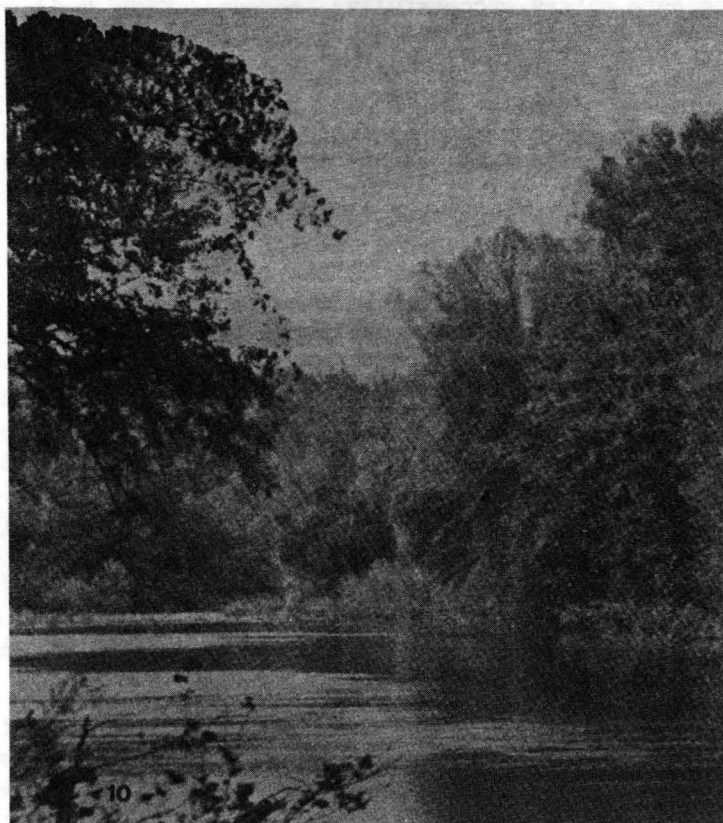
The second summary, prepared by the U.S. Fish and Wildlife Service, covers the entire Mississippi Flyway, from Minnesota to Louisiana and includes a total of 14 states. It gives data for three years, 1974 through 1976, and is called the "Midwinter Waterfowl Survey," indicating that the eagle count is part of a much larger assignment.

	<u>Bald Eagles Sighted</u>	<u>Percent Immature</u>
1974	1736	31.7%
1975	1506	32.0%
1976	2006	37.1%

While the 1975 count looks out of line, the increase in the ratio of immature to mature birds is again apparent.

In conclusion, these figures can be related to over-all eagle population estimates of the U.S. Fish and Wildlife Service. In early 1973 a total population of both northern and southern races of 750 breeding pairs was proposed. If we apply up-to-date ratios for immature birds (30% for the southern race, 37% for the northern) we come to about 960 breeding pairs in 1976. Recently, a number of publications have made guardedly optimistic statements about a recovery of the bald eagle populations. Let us hope that the many efforts by devoted people will bear fruit, and that our national will continue to soar in majesty

fruit, and that our national emblem bird will continue to soar in majesty.



EAGLES!

The eagles fly to the tree tops
Where the beauty never stops.
But when you see these beauty
full birds
You can only describe them
with beautyfull words
When you see this beautyfull
sight
You love it with all your might.

Poem by Timothy Doolittle, age 9
after participating in the
Eagle count.



ONE DAY BALD EAGLE COUNT – February 14, 1976 **PRELIMINARY REPORT**

Again, most of the Mississippi River was covered from its source to below St. Louis and then into Kentucky and Tennessee. The Wisconsin River was covered by Terry Ingram and party. The Illinois River was covered from Ottawa to Grafton. This river was handled by Dr. L.H. Princen. The area of the Mississippi from Bellevue to Warsaw, Iowa was again covered by cars and a plane. Dr. Hayden DeDecker flew the plane with Peter Petersen doing the counting. The St. Louis Audubon Society had the most people counting. Lockmasters, Fish & Wildlife and Game Management, Bird Clubs and others took part. Thanks to all.

LOCATION	ADULTS	IMMATURES	NOT AGED	TOTAL
Lock & Dam 3 thru Lock & Dam 11	255	62	8	325
Lock & Dam 12 to Lock & Dam 22	227	56	6	289
From Lock & Dam 22 to below St. Louis	95	55	9	169
Illinois River	126	88	18	229
River Totals	703	258	51	1012
River percentages	73.2%	28.2%		
Illinois Wildlife Refuges	11	18	3	32
Kentucky	15	16	9	40
Totals	729	296	63	1084
Percentages	68.46%	31.54%		
Golden Eagles				
Illinois Refuges	0	8		8
Kentucky	1	1		2
Tennessee	4	4		8
Indiana	0	1		1
Totals	5	14		19

For the period 1962 thru 1966 an average of 601 eagles were found – percentage 80 to 20%.

For the period 1967 thru 1971 an average of 745 eagles were found – percentage 72 to 28%.

For the period 1972 thru 1976 an average of 1028 eagles were found – percentage 70.8 to 29.2%.

Missouri	36	37	0	63 (2 reports)
Tennessee	47	16	15	78 (complete state)
Totals	83	53	15	141
Percentage	61%	39%		

Last years count for Nebraska was lost in the mail, here is the total 91 adults, 15 immatures and 2 not aged for a total of 108. This years total 130 adults, 20 immatures for a total of 150. Comments: Warm weather caused the rivers to open up, as we proceeded up the Mississippi River it was about 25% open, as we returned 6 hours later the river was nearly free of ice. The next day it was completely open. A 60 mile section of the river produced only three eagles where 80 plus were always found on the other counts. A section of the river that had 126 eagles only seven days before only produced 32. We found no floating ice as the ice just disappeared in the warmth. Tennessee and Kentucky as well as most places reported mostly open water. One spot in Indiana covered by Steven H. Glass had two Bald and one Golden Eagle. His plans for next year is to cover the complete state. Our present plans call for more complete mid-west coverage. Several reports came in of eagles found away from the river, these were mostly immatures. The January Waterfowl Count on the Mississippi River in Illinois as well as the Illinois River produced a total of 719 of which 464 were adults and 254 were immatures. Percentage 64 to 36. States were handled by the same groups as on other years. Next count Feb. 5, 1977.

Focus on the



WHY MISSOURI WILDERNESS?

By Betty Wilson

Missouri is one of only seventeen states that have no legally protected wilderness areas. Our beautiful streams, forested lands and hills will not always be here if we do not move to protect them. There is a need, too, to preserve wilderness to remind our urbanized society of the delicacy and vulnerability all living species - of plant and tree, of animal and insect.

Under the National 1964 Wilderness Act, no development or exploitation is permitted in areas which are part of the National Wilderness System. They are kept in a natural state, unlike national forests and other federal lands.

The six areas proposed for Missouri have been federal property for years, being in the large Mark Twain National Forest. They are the Bell Mountain wilderness in Iron County and the Rockpile Mountain wilderness nearby, about 100 miles south of St. Louis; and the Irish wilderness, Paddy Creek area, Piney Creek wilderness and Hercules Glades wilderness, all in southernmost Missouri counties.

The proposed wilderness is federal land. The issue is not ownership but how the land is to be used. The proposal would set aside 60,000 acres in which no use would be permitted. These acres are less than 1% of the public lands in Missouri. However, considerable land use is permitted in the way of timbering and mining in our national forests.

Strong opposition to the wilderness system has surfaced in Missouri. There is opposition from lumbering firms and from the mining industry. Throughout the Ozarks there is intense feeling against government control of land. There is a belief that the land will remain in good condition without the need for control.

In the case of the new wilderness proposal, however, there is powerful support from every conservation organization in Missouri, from the Conservation Commission, the Department of Natural Resources and Governor Bond. The final decision will be made in Congress. At last, on March, both Missouri, Stuart Symington and Thomas Eagleton

on March 25, both Missouri Senators, Stuart Symington and Thomas Eagleton, introduced S 3204 in the Senate. At the same time, Representative James Symington introduced identical HR12821 in the House.

As the Ozark Sierran, June-July 1976, points out, "S3204/HR12821 would designate Bell Mountain - 8533 acres, Rockpile Mountain - 4170 acres, Paddy Creek - 6888 acres and Piney Creek - 8432 acres as Wilderness Study Areas. Two aspects of this bill are particularly good: 1) it designates three of the areas most severely threatened right now by timber sales and roads - Bell, Paddy and Piney; 2) it incorporates the boundary revisions worked out by citizen conservationists to eliminate most private lands.

Irish and Hercules are not mentioned in the bill. Of course no Missouri Wilderness can be adequate without Hercules and Irish. On the other hand, S3204/HR12821 was deliberately tailored by our legislators to include only areas approved by all affected Congressmen. All six areas can be included if we gain the approval of Gene Taylor for Hercules and of Richard Ichord for Irish."



Mayapples, Irish Wilderness

photo by Oliver Schuchard

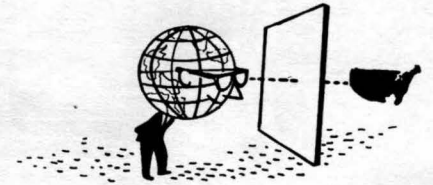
NOW IS THE TIME to get out pen and paper and write letters in support of the Missouri Wilderness Bill. Senators Eagleton and Stuart Symington, and Representative Jim Symington should be thanked for introducing S3204/HR12821. At the same time, urge that hearings be scheduled for these bills and legislation be passed this year. In the confusion of an election year, only the bills that demand attention will receive it.

Preservation of certain areas in the state for their wilderness values achieves not only the best use of such lands but adds enormous protection to fragile watersheds. Because of its support of this important program, the St. Louis Audubon Society has joined the Missouri Wilderness Coalition.





CAMERA DEPARTMENT



SOME MARVELS OF THE NATURAL WORLD

About 250 persons enjoyed the St. Louis Audubon Society's new illustrated lecture, "SOME MARVELS OF THE NATURAL WORLD", on Friday, June 4. The premier showing was held at the County Library Auditorium, 1640 South Lindbergh. The lecture, produced by the Nature Photography Section of the Society from winning entries in the 1976 Nature Photography competition of the St. Louis Audubon Society, is now the property of the Society for use in filling requests for programs from groups, organizations and schools.

Seventy-four slides were selected by the contest judges- Paul Bauer, Gary Giessow and Tom Brooks, all board members of the St. Louis Audubon Society and themselves accomplished photographers). Lee Mason, who had originally suggested the making of such an illustrated lecture, then noted the subject-matter of each transparency and parceled out requests for research on the various pictured subjects to volunteers from the Nature Photography group. After studying the material gathered and the slides, Lee worked them into a threaded narration depicting "SOME MARVELS OF THE NATURAL WORLD". Gerald Turk, a member of the Planning Board of the Nature Photography Section, photographed the title shots.

Ed Mason introduced Paul Bauer, one of the Judges, and he explained the judges' method of selection, some difficulties and fine points in choosing winners, and the judges' efforts to be completely objective in their selections.

Martin Schweig, Jr., President of the Saint Louis Audubon Society, presented award certificates to the winning exhibitors after the showing. In alphabetical order, the winners are: Elizabeth Behle, Edith Brune, Herman Brune, Alex Cole, Dorothy Cole, Mary Colton, Ralph Cook, Gail Delgman, Rosaleen Devlin, Ted Galambos, Tom Johnson, Al Lodwick, James McCaskill, Edward Mason, Lee Mason, John Mullins, Elizabeth Nettles, Eloise Pillman, Eric Ratering, Gary Shackelford, Leona Spence, James Teng and Gerald Turk.

A special award of an 8x10 inch color print and internegative of a slide of his choice was made to: Al Lodwick, James McCaskill, Gary Shackelford, James Teng and Gerald Turk. James McCaskill's photograph of a Grass Spider was accorded "Best of Show".

Any groups, organizations and schools interested in a presentation of "SOME MARVELS OF THE NATURAL WORLD" should contact the Saint Louis Audubon Society, telephone 771-2731, or write Miss Emily Fast, 4483 Remus, Florissant, 63033, telephone 839-2032. This lecture is a 30 minute program.



Design for Conservation

JIM AUCKLEY

MISSOURI DEPARTMENT OF CONSERVATION

Efforts to expand Missouri's conservation program are winding into high gear. If the work is successful, wildlife conservation will expand to include non-game as well as game species. Unique natural area (such as prairies or swamps) will be purchased for preservation and public enjoyment, and outdoor recreation will become an ever richer experience.

Those conservation goals are part of a plan called "Design for Conservation." The plan outlines what the Missouri Department of Conservation would do with an infusion of additional funds. Citizen conservationists, including many Audubon members, are close to finishing a petition drive which will allow Missourians to vote on providing money for the conservation plan.

Conservationists cite the need for the "Design." The face of the land is changing; Missouri has lost over one million acres of forest land in a decade. Prairies, home of the endangered prairie chicken, are but a dwindling shadow of the past. Delicate natural areas, refuges of unique plant species, grow scarcer. More people are seeking outdoor recreation at a time when untrammelled outdoor areas are diminishing.

If the "Design" plan becomes a reality, the state will have a more well rounded conservation program and greater opportunities for outdoor recreation. Unlike the Department of Conservation's present activities (run by income from hunting and fishing permits) the expansion would be paid for by Missourians in general, and programs would focus on nonconsumptive as well as traditional (hunting and fishing) outdoor recreation.

What would the proposal mean to an individual town or county? A 2,000 acre forest might become available for public use. A large wetland area might be created and maintained, used, in seasons, by nature enthusiasts, school classes and waterfowl hunters. A community watershed lake could be constructed. A nearby unique piece of ground might be preserved - a prairie chicken booming ground or a heron rookery, a delicate spring branch or cave.

Saving such areas, along with expanding conservation services, will require more funds than those now available to Missouri's Department of Conser-

vation. The cost of conservation has risen along with other things, even so, conservationists say now is the time to act. A forest that could be purchased for public use now might not be available in 20 years. And if purchased now, they say, think of its value to Missourians in 50 or 100 years.

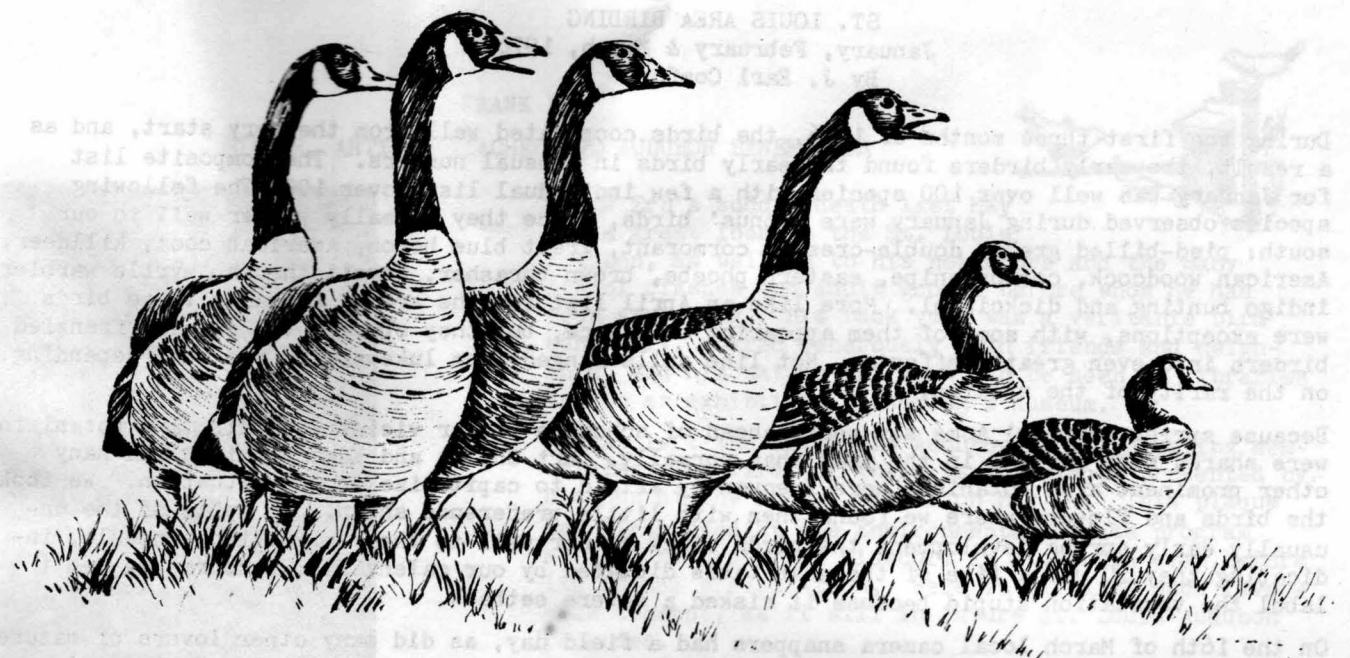
DESIGN FOR CONSERVATION proposes, over a 20 year period, acquisition of 121,000 acres of upland habitat to be made available for public hunting, nature enjoyment and education. Five new waterfowl areas would be developed and serve as conservation, education and outdoor recreation sites attuned to waterfowl habitat. Unique natural areas such as flood plain forests, spring branches, glades and marshes would be acquired. State forests would be expanded, managed not only for timber but recreation and education, and include eight metro forests within 50 miles or less of urban centers. A number of small lakes, rural and urban, would be constructed and additional stream access sites acquired.

Public services would include the many services presently offered by the Department of Conservation, plus programs where the Department could be of further service. Wildlife management services to landowners would be expanded along with fisheries and other aquatic management. Some 80 small urban lakes would be managed for use by underprivileged and inner city residents. Forest management, law enforcement, the information program and conservation education service would be broadened. A system of conservation interpretative centers would be constructed and manned on natural areas.

Management and research would continue to provide information for the enhancement and preservation of outdoor Missouri. Studies would include such subjects as stream channelization and non-game wildlife species. Forest and aquatic research, water pollution enforcement, large reservoir management and forest fire control would be strengthened.

A citizen group, the Citizens Committee for Conservation, is wrapping up an initiative petition drive to fund the "Design." If the drive is successful (the signatures of about 150,000 registered voters are needed) a constitutional amendment will appear on the November ballot.

Missourians will be given a chance to vote for a 1/8 of 1 per cent sale tax that would be earmarked for conservation use only. Proceeds would be used to put the "Design for Conservation" into action. If the dream becomes reality, Missouri will have the kind of conservation program it needs.



WALKING GEESE

Recently a friend of mine lent me a book, "The Migrations" by Georges Blond, a Frenchman. This fascinating book published in 1956, is now out of print.

It describes the migration of Grey Lags Geese from a lake in western Siberia called Lake Chany, near Omsk. This lake is a very important nesting area for waterfowl, particularly Grey Lags.

For some reason, these geese start their southern trip while in a flightless condition. As you know, most waterfowl are in this state from the last week in July for a month, or until their flight feathers grow back. This means they must walk the first hundred miles, then fly over the Tien Shan Range in western China, the Karakoram Range, and finally the Himalayas themselves, sometimes flying at 26,000 feet. Of course, the freeze up in northern Canada comes well after flight feathers have grown back.

I was talking to Charlie Schwartz the other day about these Gray Lags. Charlie and Libby spent sometime several years ago at Churchill, Manitoba, and at a place called Eskimo Point, some 200 miles further north. Charlie said that in the huge Canada Goose flocks nesting on western shore of Hudson Bay, walking was not abnormal; in fact, newly hatched goslings sometimes must walk from 30 to 40 miles to the sea.

I have recently been reading Des and Jen Bartlett's book, "The Flight of the Snow Geese." They saw snow geese walking 40 miles to the tidal flats. Geese nesting close together on the tundra must eventually use up most of the available food, and the tidal flats must be a good feeding area after the huge hatch takes place in that country.

I frankly can't believe that the pad or foot of a goose was designed for walking. Surely, it is meant for swimming or paddling. But nevertheless, geese seem to be able to walk long distances.

By Warren Lammert

ST. LOUIS AREA BIRDING
January, February & March, 1976
By J. Earl Comfort

During the first three months of 1976, the birds cooperated well from the very start, and as a result, the early birders found the early birds in unusual numbers. The composite list for January was well over 100 species with a few individual lists over 100. The following species observed during January were 'bonus' birds, since they normally winter well to our south: pied-billed grebe, double-crested cormorant, great blue heron, American coot, killdeer, American woodcock, common snipe, eastern phoebe, brown thrasher, hermit thrush, myrtle warbler, indigo bunting and dickcissel. More like an April list for the area. Actually these birds were exceptions, with some of them appearing only once, but they spurred the already frenzied birders into even greater efforts. Hot line calls ranged from lukewarm to red hot, depending on the rarity of the species.

Because spring 'sprang' some six weeks ahead of schedule in our vicinity birding and botanizing were shared much earlier in the year than normally. Art Christ and Edgar Denison and many other prominent area botanists were frequently afield to capitalize on the situation. We took the birds and flowers where we found them with little preference shown. In spite of the unusually early spring development the birds stuck rather well to their migration schedule, indicating they DO use a time of the year table dictated by our calendar. Of course we can't label the vegetation stupid because it risked a severe setback.

On the 16th of March local camera snappers had a field day, as did many other lovers of nature. During the night a five inch snow had transformed the world into a fairyland. Fortunately, (or unfortunately), a warm sun and a high wind shortened the life of this wonderland, but not before nature and camera buffs had made a record of the beautiful scenes.

The following birds in their AOU checklist order are considered the rarest seen during the three months: eared grebe, oldsquaw, white-winged scoter, goshawk, golden eagle, pigeon hawk, California, glaucous and Iceland gulls, black-legged kittiwake, fish crow, Bohemian waxwing, green-tailed towhee, common redpoll, red and white-winged crossbills, snow bunting and Smith's longspur.

A highlight of the period was the regular visit by a Harris' sparrow to the feeder of Bill and Mary Wiese in Kirkwood - on hand day after day, week after week. Another highlight was the appearance of the spectacularly colored evening grosbeaks at many area feeders.

Areas most frequently visited by the birders were points on both sides of the Mississippi River and the August A. Busch Wildlife area in St. Charles County. As of March 31 137 kinds of birds had been listed. This included 22 species of ducks, which is our yearly average for this interesting family, most of which nest north of St. Louis. The best (rarest) bird of the period was a green-tailed towhee, a species that normally prefers to range in the far, far west.



Sketch by Clair Condon

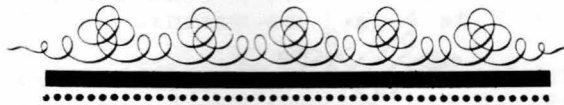
FRANK ERB
BIRDER, ARTIST, TEACHER AND AUDUBON BENEFACTOR



Frank Erb's sudden death last May was a great loss to the St. Louis Audubon, as well as to his neighbors and the many school classes and adult groups before whom he has been appearing. His back yard was a veritable bird sanctuary, shared generously with friends and neighbors, and his nature art work can be seen at libraries and in an exhibit in Pickering's museum.

He has left the St. Louis Audubon Society lasting memorials. The first of these is the plaque presented by his son at the Annual Dinner on May 14. This plaque was first used at the Environmental Update program at the University of Missouri in St. Louis even before its formal presentation. Here it elicited much favorable comment, as it will in future St. Louis Audubon programs.

A second gift from Mr. Erb's family is the series of charts which he created for his lectures. These charts are all hand drawn and painted and contain material for all age groups - kindergarten to adult. Some show individual birds, some portray data (populations, types of food, migration routes, etc.) some are habitat sketches and others excellent anatomical drawings. It is hoped that some member (or members) of the St. Louis Audubon Society will follow in Mr. Erb's footsteps and develop talks to go with these superb illustrations, thus continuing the fine tradition he has established. The St. Louis Audubon Society extends its heartfelt gratitude to Frank Erb and his family for these invaluable contributions.



Although 1975 was International Women's Year, a little of that spirit carried over into 1976 as the Conservation Federation of Missouri not only elected three women as directors, but honored several women at its Awards Banquet during the annual meeting held in Jefferson City on March 12-14.

Betty Wilson, Claudia Spener and Connie Hath were elected Directors and will represent the St. Louis Audubon Society. The "Conservationist of the Year" award went to Doris "Dink" Keefe for her work on the Citizens Committee for Conservation petition drive. The four Jefferson County housewives who spearheaded the Mastadon Park campaign won the "Conservation Organization of the Year" award.

Among other business was the Non-game Committee's resolution to save the habitat of the so-called "Swanson's" warbler at Big Oak Tree State Park. The AOU taketh away and the Federation giveth a new species!

One highlight was the passage of a resolution submitted by Betty Wilson urging the state legislature to appropriate money so that Missouri may receive federal matching funds for sewage treatment. Another was a talk by a director of Argonne National Laboratory on nuclear power plants followed by some informed questioning, especially by a delegation from Westminster College in whose backyard Union Electric's power plants may be built.

The Audubon Society representatives feel that the Conservation Federation has made many contributions to the cause of conservation in Missouri and hope that St. Louis Audubon will participate more actively in the future.



AUDUBON WILDLIFE FILMS



The St. Louis Audubon Society will again offer in 1976-77, the Wildlife Film Series free of charge to the general public. October 22, Stefan A. Kling will present The Vanishing Eden. On November 26, Burdette E. White will show and narrate Vanishing American Wildlife and March 4, C.P. Lyons bring to the Society The Resplendent Land. Also, there will be two additional local program. Folders giving dates and descriptions will be mailed to Society members.



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